



Karakuri Somersault Doll Kit

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TOOLS:

- [Hobby knife \(1\)](#)
- [Ruler \(1\)](#)
- [Scissors \(1\)](#)
- [Screwdriver \(1\)](#)



PARTS:

- [Head \(1\)](#)
- [Hair accessory \(2\)](#)
- [Pad \(1\)](#)
- [Iron ball \(4\)](#)
- [Double-sided tape \(1\)](#)
- [Body \(1\)](#)
- [Right arm \(1\)](#)
- [Left arm \(1\)](#)
- [Sleeve \(2\)](#)
- [Tube \(1\)](#)
- [String \(1\)](#)
- [Wedge \(4\)](#)
[2 are spare](#)
- [Jacket \(1\)](#)
- [Hakama pants \(1\)](#)
- [Back flap \(1\)](#)
- [Pedestal base \(2\)](#)
- [Step \(3\)](#)
- [Leg \(4\)](#)

- [Pedestal connector \(2\)](#)
- [Post \(3\)](#)
- [Post adjustment nut \(3\)](#)
- [Screw \(16\)](#)
- [Height gauge \(1\)](#)

SUMMARY

Here's how to build the [Gakken Karakuri Somersault Doll](#).

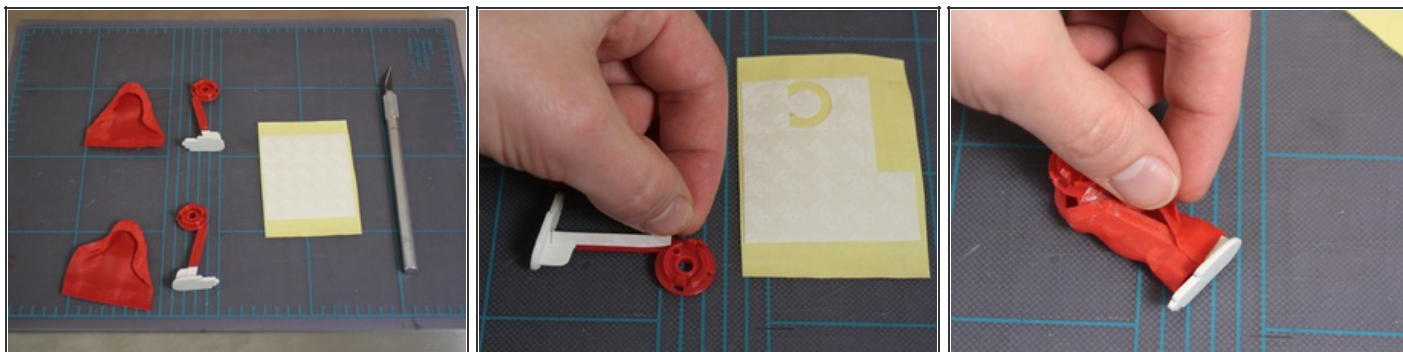
Employing a centuries-old secret artisan technique collected from real Edo-period figures, [the kit](#) includes everything you need to create your own acrobatic doll (even the screwdriver!), plus a festive traditional kimono and a stylish tiered pedestal on which to stage performances. Moreover, with you pulling the strings, you can adjust the mechanism to control the velocity of the doll's action. There are no English instructions included (book and kit are in Japanese but beautifully done) but the detailed illustrations are more than enough to easily put this kit together. MAKE is proud to be the exclusive distributor in North America for these brilliant kits from Gakken.

Step 1 — Karakuri Somersault Doll Kit



- Open the box, and dig all the parts out of their bags.
- Grab your tools.

Step 2



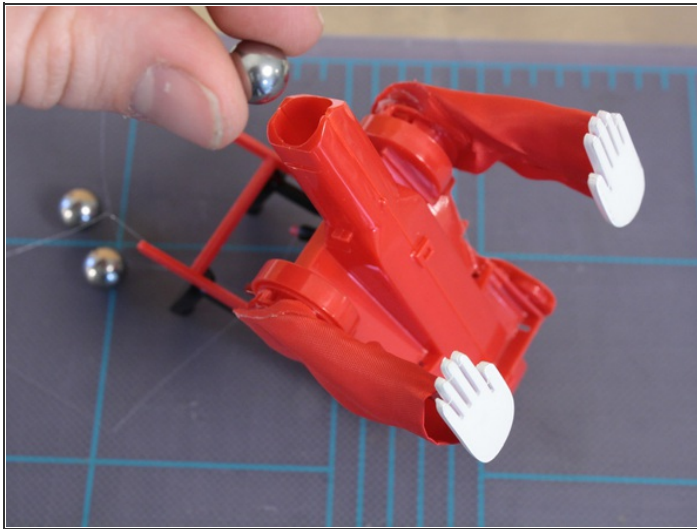
- Use a long strip of the included tape to attach the sleeve to the arm.
- Add another long strip of tape to the sleeve and fold the other side over.
- Repeat for both arms.

Step 3



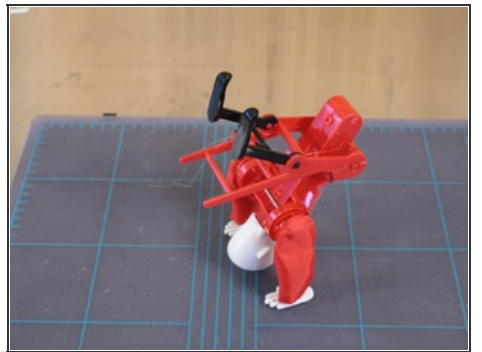
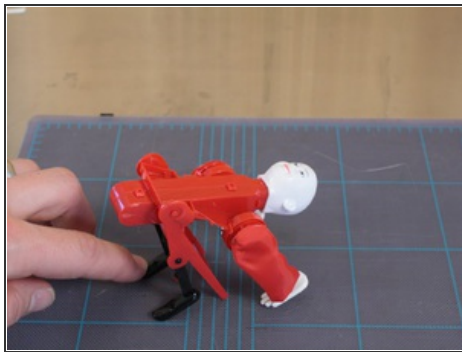
- String the filament through the armpit hole, tie to arm tab.
- Run filament through the other holes, ending at tension peg.
- Pull the tension until the "z" pattern is formed with the arm and leg.
- Repeat for both sides.

Step 4



- Place bearings in neck.
- Attach head.

Step 5



- Test by standing the doll up, and giving him a backward push. He won't complain.
- If the tension is correct on the filaments, he'll do a back flip.
- If not, add or remove tension and test again.

Step 6



- Put the doll's clothes on, following the printed directions.
- Add the totally sweet head ornaments.

Step 7



- Build the pedestal.
- Adjust the step height with the guide piece.

Step 8



- Place the doll on the top step, facing backwards. His toes should be just at the edge of the platform.
- Give him a gentle push backward. He should do a series of backflips down the platform, until he's resting on the ground.

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